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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,989	04/15/2004	Yoshikazu Miyajima	1232-5380	7544
27123	7590	10/06/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			MATHEWS, ALAN A	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/824,989

Applicant(s)

MIYAJIMA, YOSHIKAZU

Examiner

Alan A. Mathews

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 7 and 11-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/14/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 recites a third measurement unit and a fourth measurement unit, but does not recite a first or second measurement unit. How can there be a third measurement unit and a fourth measurement unit without a first measurement unit and a second measurement unit being recited?

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 8, 9, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Amemiya et al. (U. S. Patent No. 5,835,560). Amemiya et al. discloses in figures 1 and 9 an exposure apparatus comprising a reflective element 2 for radiation 1 and a mask (original) 10 and a wafer (plate) 11. Figure 6 discloses a first driver 3 (see column 4, line 21) for providing the reflective element 2 with a force and/or a displacement, and a second driver 15 (see column 6, lines 12-27) for providing the reflective element 2 with a force or displacement. Drivers 3 and 15 are connected in series to each other. With respect to claim 9, a vacuum is maintained inside the mirror chamber 6 (see column 4, lines 37 and 38). With respect to claim 16, figure 30 discloses development step 17.

5. Claims 1, 6, 8-10, 16, 17, and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi et al. (U. S. Patent No. 6,757,051). Takahashi et al. discloses in figure 3 and column 12, lines 24-65, a reflective element M2 and a first driver 15 and a second driver 17 for providing reflective element M2 with a force and/or a displacement. Drivers 15 and 17 are connected in series. With respect to claim 6, column 13, lines 56-62, disclose that each drive element has a sensor for detecting respective amounts of drive. With respect to claims 8 and 16, figure 3 discloses an exposure apparatus with original R and plate W. With respect to claim 17 and 21, element 12 is a barrel.

6. Claims 1-5, 8, 18, and 19 are rejected under 35 U.S.C. 102(a) as being anticipated by Butler (U. S. Patent Application Publication No. 2003/0042354 A1). Paragraph # 37 discloses

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the use of a reflective mask, which would be a **reflective element**. Paragraph # 40 discloses the first positioning device  $M_1$  and  $M_2$  to position the mask. Paragraph # 40 further discloses that the mask has a **fine positioning** and a **coarse positioning** module. The coarse positioning module and the fine positioning module would be the first and second drives connected in series. The fine positioning module would have a minimum unit of displacement amount that is smaller than that of the first driver.

7. Claims 1, 8, 9, and 16 are rejected under 35 U.S.C. 102(a) as being anticipated by Chiba et al. (U. S. Patent No. 6,014,421). Chiba discloses in figure 2B a reflective element 4 and first and second drives 11 and 13. Element 109 in figure 1 is a vacuum chamber.

***Allowable Subject Matter***

8. Claims 7 and 11-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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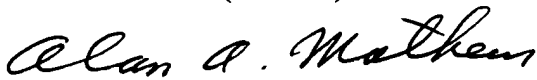
*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents cited in the PTO-1449 are cited for the same reasons they were cited in Applicant's IDS.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan A. Mathews whose telephone number is (571) 272-2123. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alan A. Mathews  
Primary Examiner  
Art Unit 2851

AM